ArgoNeuT Status

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Update

- Began emptying cryostat on Thu. night.
- As of Mon. morning, ~1300lbs of argon had been vented.
- “Broke” outer vacuum jacket Monday....inner cryostat now about at room temp.
- Outer flange removed today (Tue., Sept. 22)
- Inner flange to be removed tomorrow (Wed., Sept. 23)
- Begin fixing various items once flanges removed....

Step-by-Step

1. Study cable layout as much as possible before removing anything
    - Which cables are in contact with what?
    - Are all BVDC cards plugged in properly?
2. Test HV feedthrough in air. Remove HV feedthrough and test in liquid (next slide)
    - Before disconnecting anything....
3. Remove TPC/Purity Monitor.
4. Study all Purity Monitor fibers in Stephen's PMT station.
    - Replace any suspect fibers with new ones.
    - Add Faraday cage to Purity Monitor?
5. Build TPC cable holder.
    - Some form of cable tray mounted on TPC
    - Arrange cables so they come out of tray in compact bundle before making their trip up the cryostat chimney.
6. Fix shield pipe
    - Remove existing pipe
    - Design/weld new pipe to elbow flange.
7. Better insulate HV feedthrough connection.
    - Add insulation to HV copper wire, all the way over to TPC cathode.
8. Calibrate thermocouple readings.
9. Change input "stinger" arrangement?
10. Change resistance between last field ring and "ground" to ensure constant drift v.

HV Test

- Hans has offered to let us use this vacuum jacketed dewar to test our HV feedthrough.
- Install feedthrough on top flange, then fill until end of feedthrough is submerged.
- Ramp HV slowly up to 25kV....see if current drain is detected or not.
- If current drain is detected, feedthrough needs to be replaced.